



DEPARTMENT OF THE AIR FORCE  
AIR FORCE CIVIL ENGINEER CENTER  
INSTALLATION RESTORATION PROGRAM  
OTIS AIR NATIONAL GUARD BASE, MA 02542-1320

10 November 2016

Installation Restoration Program  
AFCEC/IBCC  
322 East Inner Road  
Otis ANG Base, MA 02542-5028

The Installation Restoration Program (IRP) sampled your residential private well on 05 October 2016. The sample collected from your well was analyzed for perfluorinated compounds (PFCs) and 1,4-dioxane. The chemicals that we sampled for in your well have been detected above standards/advisories in the nearby Ashumet Valley groundwater plume that the Air Force is currently investigating. A certified laboratory used U.S. Environmental Protection Agency (EPA) approved methods for analyzing your water samples.

In May 2016, the EPA adopted a final health advisory value (HA) of 0.07 micrograms per liter ( $\mu\text{g/L}$ ) for two of the PFCs, perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA), in drinking water. In situations where both PFOS and PFOA are present in drinking water, it is recommended that the concentrations be added together and the sum compared to the 0.07  $\mu\text{g/L}$  HA. Note that there are no Federal or State standards or health advisories for the other PFCs. The Massachusetts state standard for 1,4-dioxane in a drinking water source is 0.3  $\mu\text{g/L}$ .

No 1,4-dioxane or PFOA were detected in the sample collected from your private well on 05 October 2016. PFOS was detected, but at a concentration that is below the final HA for this compound in drinking water. A table that summarizes the results for your well and the current drinking water standards/health advisories is attached to this letter. More information about PFCs and 1,4-dioxane can be found online at <https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos> and [https://www.epa.gov/sites/production/files/2014-03/documents/firro\\_factsheet\\_contaminant\\_14-dioxane\\_january2014\\_final.pdf](https://www.epa.gov/sites/production/files/2014-03/documents/firro_factsheet_contaminant_14-dioxane_january2014_final.pdf).

Your well was identified for sampling because your property is located near an Ashumet Valley plume treatment system infiltration gallery, which returned treated water from the plant to the groundwater near Currier Road. The emerging contaminants 1,4-dioxane and PFCs were detected in this treatment plant effluent at concentrations below the available standard/health advisories. In response to these detections, AFCEC stopped discharging treatment plant effluent to the Currier Road trench on 29 September 2015.

For more information or to request a copy of your laboratory summary report please call/email Doug Karson, Community Involvement Lead at (508) 968-4678 x 2 or [douglas.karson@us.af.mil](mailto:douglas.karson@us.af.mil). You may also contact Ellie Donovan, Regional Planner, Massachusetts Department of Environmental Protection, at (508) 946-2866; [ellie.donovan@state.ma.us](mailto:ellie.donovan@state.ma.us).

Sincerely,



ROSE H. FORBES, P.E.  
Remediation Program Manager

Attachment:  
Summary Table -

- c. David Carignan, Falmouth BOH
- Len Pinaud/Ellie Donovan, MassDEP
- Jan Sullivan/Marc Nascarella, MassDPH
- Doug Karson, AFCEC

## Summary of Private Well Analytical Results

Location	Date	PFOS (µg/L) EPA HA = 0.07	PFOA (µg/L) EPA HA = 0.07	[PFOS+PFOA] (µg/L) EPA HA = 0.07	PFBS (µg/L)	PFHpA (µg/L)	PFHxS (µg/L)	PFNA (µg/L)	1,4-Dioxane (µg/L) MCP GW-1 = 0.3
RS0030CAPE	11/3/2015	0.0024 J	ND	0.0024 J	0.0012 J	ND	0.0039 J	ND	ND
RS0030CAPE	6/20/2016	0.0005 J	ND	0.0006 J	ND	ND	ND	ND	ND
RS0030CAPE	10/5/2016	0.0021 J	ND	0.0021 J	0.0005 J	ND	ND	ND	ND

Data Source: AFCEC, November 2016

## Notes:

- <sup>2</sup> Values lagged with a "J" are estimated concentrations

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EPA = U.S. Environmental Protection Agency  
 GW-1 = MCP Method 1 Groundwater-1 Standard  
 HA = Final EPA Health Advisory Value  
 J = estimated concentration  
 MCP = Massachusetts Contingency Plan  
 ND = not detected  
 µg/L = micrograms per liter

## Perfluorinated Compounds

PFBS = Perfluorobutane Sulfonate  
PFHpA = Perfluoroheptanoic acid  
PFHxS = Perfluorohexane Sulfonate  
PFNA = Perfluorononanoic acid  
PFOA = Perfluorooctanoic acid  
PFOS = Perfluorooctane Sulfonate

